

ORIGINAL

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

RECEIVED

DEC 23 1998

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Establishment of Public Service Radio )  
Pool in the Private Mobile ) RM 9405  
Frequencies Below 800 MHz )  
 )

To: The Commission

COMMENTS OF HEWLETT-PACKARD COMPANY

Hewlett-Packard Company ("HP"), by its attorneys, hereby comments on the Petition for Rulemaking ("Petition")<sup>1</sup> filed by UTC and other "critical infrastructure" industrial communications organizations in which they ask the Commission to establish a new "public safety radio service" pool of frequencies.

I. OVERVIEW.

HP supports the underlying premises of the Petition: that the FCC must take action to protect essential communication systems that are vital to health and safety from expanding commercial systems in frequencies below 800 MHz; that frequencies must be reserved for such vital functions; that the fate of such vital communications operations cannot be left to frequency coordinators who serve commercial or other unrelated communications interests; and that, under the statute, licenses for frequencies employed for such health and safety services must not be auctioned.

HP takes no position on whether the various industrial services identified in the Petition fall within the statutory definition of "public safety radio services."<sup>2</sup> There should be no question, however, that critical care medical telemetry does fall within the definition and must be protected.<sup>3</sup> Accordingly, the FCC should include medical telemetry in its implementation of regulations of this statutory protection.

<sup>1</sup> Public Notice, Report No. 2306 (November 23, 1998)

<sup>2</sup> 47 U.S.C. § 309(j) (2)

<sup>3</sup> Id.

No. of Copies rec'd. 46  
List ABCDE

While there maybe a commonalty of certain issues before the Commission, it should also be recognized that the frequency requirements and interference constraints of medical telemetry operations are vastly different from those of utility pipelines. Among other things, the frequencies identified in the Petition to be earmarked for the proposed public safety radio service do not correspond with the frequencies in the 450-470 MHz band that are employed by medical telemetry nor would the criteria proposed for interference protection for mobile communications protect very low power medical telemetry units.

Finally, just as the petitioners' utility and other constituents do not want the fate of their operations to be decided by coordinators of business channels who cannot be expected fully to appreciate the protection required for such critical infrastructure services, the fate of critical care medical telemetry should not be left to coordinators whose interest and expertise lies in protecting the mobile communications requirements of commercial or industrial companies.

## **II. CRITICAL CARE MEDICAL TELEMETRY SYSTEMS REQUIRE PROTECTION UNDER THE STATUTE.**

Under the spectrum auction provisions of the Communications Act, the Commission's competitive bidding authority does not extend to licenses of non-governmental entities for private, internal radio systems that "are used to protect the safety of life, health, or property."<sup>4</sup> Medical telemetry systems used to monitor the vital signs of hospitalized patients fall squarely within this definition.

The overall legislative history of the relevant provisions makes clear the legislative intent to include medical telemetry operations within the ambit of "public safety" services requiring protection. Thus, while the 1997 Budget Act provision reflects a legislative intent to expand the category of public safety services that would be deemed exempt from auction,<sup>5</sup> the legislative history of the pre-existing auction statute shows that Congress understood that medical telemetry already fell within the definition of public safety services to be protected.

Thus, in the Conference Report to the original legislation that granted the FCC auction authority, it was noted that "biomedical telemetry systems may greatly

---

<sup>4</sup> Id.

<sup>5</sup> Conference Report, 105th Cong., 1st Sess. 143 Cong. Rec. H 6131, H 6173 (1997)

improve the quality and significantly decrease the cost of certain health care services,” and that, therefore, “NTIA and the FCC should carefully consider the needs of hospitals and other health care providers for interference-free radio spectrum in their respective allocation decisions made pursuant to this act.”<sup>6</sup> Two years later, the House Committee Report to the 1995 Budget Reconciliation Act expressly identified low power medical telemetry operations in the 450-470 MHz band as an example of the kind of frequency use that should not be auctioned.<sup>7</sup>

The 1995 House Committee Report went to state that the Committee’s exemption of public safety radio services from auctions included non-governmental entities “operating under codes or standards relating to public health” that fall outside the traditionally defined limits of the FCC’s “Public Safety Radio Service.”<sup>8</sup> Similarly, in a statement submitted before the Senate committee that was at the time considering parallel legislation, Senator Burns specified the legislative intent in prohibiting auctions for spectrum necessary for the operation of heart monitors used in hospitals.<sup>9</sup>

Just as utilities have specific public safety obligations,<sup>10</sup> medical telemetry systems are medical devices and as such are closely regulated by the Food and Drug Administration (“FDA”) in order to protect public health. One key safety critical specification for patient monitoring systems, including telemetry systems, is the time-to-alarm, which is a measure of a system’s ability to promptly report life-threatening conditions to the clinical staff. Industry standards have been promulgated for this parameter, and the FDA Office of Device Evaluation, which must clear medical devices before they are marketed, specifically requests information on compliance with this standard in order to assess the safety and efficacy of a device.

---

<sup>6</sup> Conference Report on the Omnibus Budget Reconciliation Act of 1993, Rep. No. 213, 103rd Cong., 1st Sess., at 479 (1993).

<sup>7</sup> See House Comm. on Budget, H.R. Rep. No. 280, 104th Cong. 1st Sess. 228 (1995).

<sup>8</sup> Id.

<sup>9</sup> See Balanced Budget Reconciliation Act of 1995: Hearings Before the Senate Comm. on Commerce, Science and Transportation, 104th Cong., 1st Sess. (September 28, 1995) (statement of Sen. Burns).

<sup>10</sup> See Petition at 16-17 (safety requirements under which Petitioners’ constituents operate).

**III. MEDICAL TELEMETRY OPERATIONS REQUIRE PROTECTION FROM EXPANDING BUSINESS AND INDUSTRIAL SYSTEMS; LEAVING THE PROTECTION TO FREQUENCY COORDINATORS WHO REPRESENT BUSINESS OR INDUSTRIAL INTERESTS IS NOT THE ANSWER.**

The issue of the need to protect medical telemetry questions in the 450-470 MHz is already before the Commission in its long-running “refarming” proceeding.<sup>11</sup> HP is hopeful that the heightened concern of the Commission and the FDA regarding this issue over the last several months will lead to a secure spectrum home for medical telemetry operations, the public interest foundation for which has been well-documented and need not be repeated here.

HP does, however, believe that the concerns raised by the Petition as to the inadequacy of the current frequency coordination process to protect vital communications should offer a word of caution to those who would suggest that the frequency coordination process can be relied upon to protect very low power medical telemetry from higher-powered users of the same frequencies. Without by any means minimizing the danger of delayed essential dispatch communications identified in the Petition, frequency coordination that might accept a communications environment where calls go through most of the time or a little noise on the line as a taxi or other delivery service is being dispatched will not work for hospitalized cardiac patients who require continuous monitoring of their condition.

Nor can the increased spectrum demands of business and industrial systems, however valuable their services might be, come close to justifying shutting down existing hospital telemetry units, with no other viable place to operate and no chance for hospitals to reasonably amortize their investment in existing systems. In essence, what the spectrum auction legislation and legislative history recognize and, in the broad view, the Petition before the Commission urges is that the Commission must consider more than just a strict economic equation of who will pay the most for spectrum or a show of hands as to who wants more frequency. That realization and the promulgation of regulations that reflect it — for all vital health and safety functions — HP wholeheartedly supports.

---

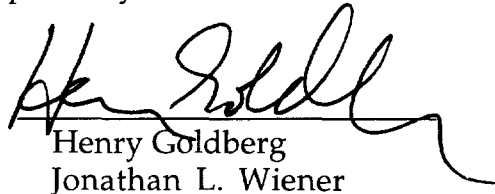
<sup>11</sup> See, e.g., HP’s Comments on Further Notice of Proposed Rulemaking, PR Docket No. 92-235 (November 20, 1995), and Reply Comments in same proceeding (January 11, 1996); HP’s Petition for Reconsideration and Clarification of Second Report and Order in PR Docket No. 92-235 (March 19, 1997) and Reply in the same proceeding (July 2, 1997).

#### IV. CONCLUSION.

Vital health and safety services should not be squeezed out of usable spectrum by expanding commercial systems with whose operation they are incompatible. That principal and statutory mandate applies no where more clearly than to critical care medical telemetry.

Respectfully Submitted,

By:



Henry Goldberg  
Jonathan L. Wiener

GOLDBERG, GODLES, WIENER &  
& WRIGHT  
1229 Nineteenth Street, N.W.  
Washington, D.C 20036  
(202) 429-4900

Attorneys for  
Hewlett-Packard Company

Of Counsel:

Jonathan L. Weil  
Senior Attorney  
Hewlett-Packard Company  
3000 Minuteman Road  
Andover, MA 01810  
(508) 687-1501

December 22, 1998

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Comments of Hewlett-Packard Company was sent by mail, postage prepaid, this 22nd day of December, 1998, to each of the following:

Jeffrey L. Sheldon  
Thomas Goode  
1140 Connecticut Avenue, N.W.  
Suite 1140  
Washington, DC 20036

Wayne V. Black  
Nicole Donath  
Keller and Heckman, LLP  
1001 G Street, NW  
Washington, DC 20001

Louis P. Warchot, Esq.  
Senior Vice President - Law and General Counsel  
50 F Street, NW  
Washington, DC 20001



/s/ Susan Jamieson  
Susan Jamieson